

## CLAIM AMENDMENTS

### IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of claims in the application or previous response to office action:

1. **(Currently Amended)** A method for authenticating a subscriber for utilizing services in a wireless LAN while using an IP multimedia subsystem of a mobile radio network, comprising:

receiving an IP address by the subscriber from the wireless LAN,  
~~using the IP address by after which the subscriber receiving the IP address~~  
~~is to authenticated the subscriber to the IP multimedia subsystem of the mobile~~  
~~radio network while giving the IP address;~~ by means of a session initiation  
protocol (SIP) registration; and

informing an element of the wireless LAN of the result of the authentication of the subscriber with regard to the IP multimedia subsystem.

2. **(Currently Amended)** The method according to Claim 1, wherein the authentication of the subscriber of the wireless LAN in the IP multimedia subsystem is ~~authenticated while is performed~~ using a home subscriber system.

3. **(Previously Presented)** The method according to claim 1, wherein the subscriber in the wireless LAN in the IP multimedia subsystem is authenticated while using an authentication server.

4. **(Previously Presented)** The method according to claim 2, wherein the subscriber transmits, via the wireless LAN, an SIP register message to a device of the IP multimedia system, which transmits a request for authentication of the IP multimedia subsystem subscriber to the home subscriber system, after which the home subscriber system authenticates the subscriber and communicates the result of the authentication to the wireless LAN access gateway.

5. (Previously Presented) The method according to claim 1, wherein an association is implemented between the subscriber terminal and the wireless LAN for transmitting and receiving via the radio interface between subscriber and wireless LAN.

6. (Previously Presented) The method according to claim 1, wherein the subscriber terminal receives the IP address from an address area of the wireless LAN, with which together with other IP transport-based data transmits and receives SIP messages that transport authentication messages from and to the IP multimedia subsystem.

7. (Previously Presented) The method according to claim 1, wherein access to services is controlled via the wireless LAN access gateway, which monitors successful authentication in the IP multimedia subsystem.

8. (Previously Presented) The method according to claim 1, wherein the wireless LAN is connected to the IP multimedia subsystem via a Gi interface.

9. (Previously Presented) The method according to claim 1, wherein the wireless LAN is connected to the IP multimedia subsystem via an Mm interface.

10. (Previously Presented) The method according to claim 1, wherein a result of the authentication is fed to a wireless LAN access gateway by a proxy-call state control function/policy control function at a location having wireless LAN coverage.

11. (Previously Presented) The method according to Claim 7, wherein the wireless LAN has a proxy-call state control function node which forwards the SIP messages to a corresponding entity in the IP multimedia subsystem and controls the WLAN access gateway with regard to the authentication result of the IP multimedia subsystem.

12. (Previously Presented) The method according to Claim 7, wherein instructions are provided to the WLAN access gateway based on a result of the authentication in the IP multimedia subsystem as to how data traffic of a subscriber is to be handled by the wireless LAN access gateway.

13. (Previously Presented) The method according to claim 12, wherein the proxy-call state control function controls the data traffic through the wireless LAN access gateway and grants, restricts, increases or declines a quantity and/or quality of the data flow of a subscriber through the wireless LAN access gateway.

14. (Previously Presented) The method according to claim 13, wherein the policy control function is part of the proxy-call state control function node.

15. (Previously Presented) The method according to claim 12, wherein the result of the authentication is fed to the wireless LAN access gateway by the call state control function/policy control function in the IP multimedia subsystem.

16. (Previously Presented) The method according to Claim 12, wherein the call state control function node of the IP multimedia subsystem controls the wireless LAN access gateway with regard to the authentication result of the IP multimedia subsystem.

17. (Previously Presented) The method according to Claim 13, wherein a Go interface is installed between the call state control function node of the IP multimedia subsystem and the wireless LAN access gateway for protected data transfer.

18. (Previously Presented) The method according to claim 1, wherein an authentication result is evaluated by expanded functionalities in the wireless LAN access gateway.

19. (Previously Presented) The method according to Claim 16, wherein the authentication result received from the IP multimedia subsystem is converted by the wireless LAN access gateway, wherein the WLAN access gateway allows subscriber data to pass there through.

20. (Previously Presented) The method according to Claim 13, wherein the evaluation of the authentication result is implemented using an application layer gateway.

21. (Previously Presented) The method according to claim 1, wherein the subscriber of the wireless LAN is also a subscriber of the mobile communication network.

22. (Previously Presented) The method according to claim 1, wherein the wireless LAN network is integrated into mobile communication networks with aid of ETSI HiperLan and IEEE 802.11.

23. **(Currently Amended)** A device for authenticating a subscriber for utilizing services in a wireless LAN with aid of an IP multimedia subsystem of a mobile radio network, comprising:

an IP multimedia system for authenticating a subscriber to be authenticated by means of a session initiation protocol (SIP) registration, and located at a location having wireless LAN coverage, by giving an IP address allocated by the wireless LAN; and

an IP multimedia subsystem for informing an element of the wireless LAN of a result of the authentication of the subscriber with regard to the IP multimedia subsystem.

24. **(Currently Amended)** The device according to Claim 23, wherein the wireless LAN comprises a second-first device constituting the-a proxy call state control function node, wherein the first device is a node in the wireless LAN.

25. **(Currently Amended)** The device according to claim 24, wherein the ~~second~~ first device constituting the proxy call state control function node of the IP multimedia subsystem is provided for controlling authentication in the wireless LAN.

26. **(Currently Amended)** The device according to claim 25, wherein the wireless LAN access gateway has a ~~third~~ second device that is configured such that the device converts the authentication result which is received from the IP multimedia subsystem, by allowing subscriber data to pass there through.